AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-29. (Canceled).

30. (Currently amended) A catheter assembly, comprising:

a catheter including at least one lumen; ~~and~~

a connector including a distal end attached to a proximal end of the catheter and a passageway in fluid communication with the at least one lumen, a proximal portion of the passageway including an engagement feature configured to connect an end of an instrument to the connector, a distal portion of the passageway including a built-in valve longitudinally fixed with respect to the connector having a closed proximal end with a slit and an open distal end, the valve proximal end distal of the engagement feature; and

a tunneler, wherein the engagement feature engages a tip of the tunneler upon insertion of the tunneler tip into the proximal portion of the passageway.

31. (Previously presented) The catheter assembly according to claim 30, wherein the valve includes a wall defining a lumen from the proximal end to the distal end, the wall configured to guide a proximal end of a guidewire from the valve distal end through the slit in the valve proximal end.

32. (Previously presented) The catheter assembly according to claim 30, wherein the connector comprises a material having a hardness in the range of about 90 Shore A to about 90 Shore D, and wherein the valve comprises a material having a hardness in the range of about 40 Shore A to about 60 Shore A.

33. (Previously presented) The catheter assembly according to claim 30, wherein the engagement feature comprises an O-ring, and wherein a wall defining the proximal portion of the passageway proximal of the O-ring is tapered.

34-39. (Cancelled).

40. (Previously presented) The catheter assembly according to claim 30, wherein the connector includes an tapered outer surface at a proximal end thereof.

41. (Previously presented) The catheter assembly according to claim 40, further comprising a syringe adaptor including a distal end configured to slide over the tapered proximal end of the connector housing and a proximal opening to receive a male luer.

42. (Cancelled).

43. (Previously presented) The catheter assembly according to claim 30, wherein the valve opens by insertion of a medical device through the valve.

44. (Previously presented) The catheter assembly according to claim 30, wherein the valve proximal end is longitudinally fixed with respect to the connector.

45. (Previously presented) The catheter assembly according to claim 30, wherein the valve proximal end is fixed relative to the engagement feature.

46. (Previously presented) The catheter assembly according to claim 30, wherein the engagement feature includes a projection into the passageway.

47. (Previously presented) The catheter assembly according to claim 46, wherein the projection has a reduced diameter relative to an inside diameter of the passageway on a proximal side and a distal side of the projection.